CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER 98-060

WASTE DISCHARGE REQUIREMENTS FOR:

ALAMEDA COUNTY PUBLIC WORKS AGENCY, URGENT SEDIMENT REMOVAL PROJECT, ALAMEDA CREEK, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter Board, finds that:

- The Alameda County Public Works Agency (hereinafter Discharger) proposes to conduct 1. urgent sediment removal activities on a 3-linear-mile reach of Alameda Creek. The Discharger has applied for Water Quality Certification under Section 401 of the Clean Water Act, as detailed in their application of May 8, 1998, and their U.S. Army Corps of Engineers (hereinafter Corps) Pre-Construction Notification, issued by the Corps on May 20, 1998. The need for dredging at the site has been identified as urgent, and the Discharger is requesting authorization to conduct dredging beginning prior to the 1998-99 rainy season. The purpose of the project is to alleviate potential local flooding problems and to meet the requirements of the Corps for flood protection. Approximately 500,000 cubic yards of silt would be removed, impacting 63.8 acres of wetlands and other waters. The reach to be dredged is located between Ardenwood Boulevard and Decoto Road in the cities of Union City and Fremont, Alameda County. The project site is tidally influenced below Ardenwood Boulevard, and transitions from brackish to freshwater upstream of Ardenwood Boulevard between that street and the Southern Pacific Railroad tracks. The site is freshwater above the railroad tracks.
- 2. To protect the water quality at and in the vicinity of the dredging site, to adequately address disposal of dredged material, to meet the objectives of California Wetland Conservation Policy, to alleviate local flooding problems, and to address public safety concerns in an environmentally responsible way, the Board has determined to regulate the proposed activities by issuance of Waste Discharge Requirements (WDRs).
- This Order allows dredging over a period of two years on the specified reach of Alameda Creek. To reduce the extent of impacts, the applicant would dredge half of the channel each year along 2 miles of the 3 mile reach, rather than dredging the whole width of the channel, as has normally been done (the 3rd mile would be fully dredged as part of the applicant's proposed Habitat Return and Channel study). This is expected to provide refugia for wildlife and to reduce the amount of time that the entire channel is disturbed and habitat is absent from the channel.
- 4. The Board, on June 21, 1995, adopted, in accordance with Section 13244 et. seq. of the California Water Code, a revised Water Quality Control Plan, San Francisco Bay Basin

proposed project, the excess will be available for credit as mitigation against future impacts from the Discharger's projects.

- 11. The Discharger has stated in their communication of June 3, 1998, that the proposed project is categorically exempt from the California Environmental Quality Act (CEQA) under the State's CEQA Guidelines Section 15301, Class 1, Existing Facilities, and Section 15304, Class 4, Minor Alterations to Land, Example (g), Maintenance dredging, where the spoil is deposited in a spoil area authorized by all applicable state and federal regulatory agencies.
- 12. The action to adopt WDRs for this facility is exempt from the provisions of CEQA, in accordance with Section 15304 (g), Title 14, California Administrative Code.
- Pursuant to Title 23, California Code of Regulations Section 3857, the Board is issuing WDRs and will not act on this application for Water Quality Certification.
- 14. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for this discharge.
- 15. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Alameda County Public Works Agency, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

- 1. The direct discharge of wastes (including dredged sediment) from active dredging sites to surface waters or surface water drainage courses is prohibited.
- 2. The dredged material shall remain within all the designated disposal areas at all times.
- 3. The dredge and disposal activities subject to these requirements shall not cause a nuisance as defined in Section 13050(m) of the California Water Code.
- 4. The discharge of decant water from active dredging sites and dredged material stockpile or storage areas to surface waters or surface water drainage courses is prohibited.

B. Receiving Water Limitations

1. The dredging activities shall not cause:

- a. Floating, suspended or deposited macroscopic particulate matter or foam in waters of the State at any place more than 100 feet from the point of discharge of diverted flow.
- b. Alteration of apparent color beyond present natural background levels in waters of the State at any place more than 100 feet from the point of discharge of diverted flow.
- c. Visible floating, suspended, or deposited oil or other products of petroleum origin in waters of the State at any place more than 100 feet from the point of discharge of diverted flow.
- d. The diverted flow shall not cause Waters of the State to exceed the following quality limits at any place more than 100 feet from the point of discharge of diverted flow:
 - i) Dissolved Oxygen: 5.0 mg/l minimum. When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
 - ii) pH: A variation of natural ambient pH by more than 0.5 pH units.
 - iii) Toxic or other deleterious substances: None shall be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.
- 2. Turbidity of the waters of the State, as measured in NTUs, at any point beyond 100 feet downstream of the point of discharge of diverted flow shall not increase above background levels by more than the following:

Receiving Waters Background

Incremental Increase

 \geq 50 units

10% of background, maximum

3. The groundwater shall not be degraded as a result of the sediment disposal and handling operation.

C. Provisions

1. The Discharger shall comply with all the Prohibitions, Receiving Water Limitations, and Provisions of this Order immediately upon adoption of this Order or as provided below.

- 2. The Discharger shall prepare and submit a sediment characterization plan to determine the suitability for disposal of sediment, acceptable to the Executive Officer, no later than 30 days prior to start of any dredging activity. The sediment characterization plan also will be used to determine whether the self-monitoring program should be expanded to include additional water quality constituents. The plan may be amended with the written approval of the Executive Officer.
- 3. The Discharger shall prepare and submit a BMP plan, no later than July 1, 1998, acceptable to the Executive Officer. The BMP plan shall identify practices to be implemented by the Discharger that will minimize impacts to the beneficial uses of waters of the State during the course of the project. The plan shall include BMPs to minimize impacts to the portion of the channel that will not be dredged in 1998. The plan may be amended with the written approval of the Executive Officer.
- 4. The Discharger will divert any flow at the site (hereinafter diverted flow) around the active dredging site using a low flow channel, pipe, or other other practices such that the flow does not flow across the active dredging site and no equipment operates in areas of flowing or standing water.
- 5. No later than July 1, 1998, the Discharger shall prepare and submit to the Board a Dewatering and Dredged Material Transport Plan, acceptable to the Executive Officer, that details how the channel will be dewatered and how wet sediment shall be transported without discharge should there still be flow when dredging is begun. The Plan may be amended with the written approval of the Executive Officer.
- 6. The Discharger shall comply with all applicable items of the Self-Monitoring Program (SMP).
- 7. The Discharger shall file with the Board monthly self-monitoring reports performed according to any SMP issued by the Executive Officer or approved by this Order.
- 8. All reports pursuant to these Provisions shall be prepared under the supervision of a suitable professional registered in the State of California.
- 9. The discharge of any hazardous, designated or non-hazardous waste as defined in Title 27, Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations shall be conducted in accordance with applicable state and federal regulations.
- 10. The Discharger shall remove and relocate any wastes which are discharged at any sites in violation of this Order.
- 11. The Discharger shall file with the Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal sites.

- 12. A delineation of existing jurisdictional waters at the Alvarado Triangle temporary sediment disposal site, verified by the Corps, shall be conducted prior to the construction of an impoundment at the site and submitted to the Executive Officer prior to the disposal of sediment at the sites. A delineation of existing jurisdictional waters at the mitigation site(s), verified by the Corps, shall be conducted prior to the start of construction at the mitigation site(s). The proposed mitigation plan shall be amended to address any impacts to existing wetlands at the site(s).
- 13. The Discharger shall ultimately dispose of dewatered dredged material at a permitted landfill, upland silt disposal site permitted by the Board, or otherwise at a site approved in advance by the Executive Officer.
- 14. The Discharger shall maintain a copy of this Order at the project site so as to be available at all times to site operating personnel.
- 15. The Discharger is considered to have full responsibility for correcting any and all problems which arise in the event of a failure which results in an unauthorized release of waste or wastewater.
- 16. The Discharger shall permit the Board or its authorized representative, upon presentation of credentials:
 - a. Entry on to the premises on which wastes are located or in which records are kept.
 - b. Access to copy any records required to be kept under the terms and conditions of this Order.
 - c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order.
 - d. Sampling of any discharge or surface water covered by this Order.
- 17. The Discharger shall implement the <u>Proposed Mitigation Plan to Accompany a Request for Permit by Alameda County Flood Control and Water Conservation District to Desilt the Portion of Alameda Creek Between Union City/Ardenwood Boulevard and Decoto Road in the Cities of Fremont and Union City, dated May 15, 1998.</u>
- 18. The Discharger shall submit a report, acceptable to the Executive Officer, identifying an additional mitigation site or sites which will provide a minimum total of 8 acres of mitigation and a Construction Plan and schedule for implementing the mitigation, no later than May 15, 1999. The Construction Plan shall show specific mitigation locations and design details.

- 19. The Discharger shall submit a Final Plan for the Habitat Return and Channel Study that is acceptable to the Executive Officer no later than November 15, 1998. The Plan shall include a detailed description of proposed monitoring, including locations, frequency, and methods, analysis, and a list of the entities that will be conducting the Study and their related experience. In addition to the parameters listed in the May 15, 1998 Proposed Mitigation Plan, the final plan shall include provisions for:
 - a. Analysis of the flow capacity of Alameda Creek in cubic feet per second and flow return period (e.g., the 100-year peak flow) at the design cross-section and differing depths of sediment deposition.
 - b. Analysis of silt deposition and transport and channel morphology and change over the monitoring period.
 - c. The design and analysis of a channel shape, such as a low-flow channel within the creek levees, that may more efficiently transport sediment and/or reduce the required frequency of dredging and impacts to beneficial uses of waters of the State.
- 20. The Discharger shall complete the Final Plan for the Habitat Return and Channel Study and submit the Final Study, acceptable to the Executive Officer, no later than November 15, 2003. Should additional dredging be required in the reach of channel being studied during the term of the Study, the Discharger shall submit a report to the Board, acceptable to the Executive Officer, detailing whether the time period the Study collects data should be extended, and the Executive Officer may require the Study to be extended until 3 years of data have been collected since the last occurrence of dredging in the channel. Should the Executive Officer determine that additional mitigation acreage is required for the project's impacts, the Discharger shall submit a Mitigation Plan for that mitigation, acceptable to the Executive Officer, no later than May 15, 2004, and shall begin construction of the mitigation in the summer of 2004. Should the Executive Officer determine that more mitigation is required, then the Discharger shall provide acceptable additional mitigation. Should the Executive Officer find that the initial mitigation is in excess of the amount required for the proposed project, the excess will be available for credit for the Discharger as mitigation against future impacts.
- 21. Any substantive changes to the Final Mitigation and Monitoring Plan and/or the Final Plan for the Habitat Return and Channel Study described herein must be approved in writing by the Executive Officer.
- 22. The Discharger shall submit mitigation monitoring reports by July of each year for a minimum of 5 years from the completion of construction at the mitigation site(s) and before a notice of mitigation completion has been submitted to the Executive Officer. The notice of mitigation completion shall include a plan for long-term maintenance and management, acceptable to the Executive Officer, of the mitigation sites. After submittal of the acceptable notice of mitigation completion, submittal of annual mitigation monitoring reports is no longer required.

- 23. These Requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws, regulations or rules of other programs and agencies nor do these Requirements authorize the discharge of wastes without appropriate permits from other agencies or organizations.
- 24. The Discharger shall obtain all the necessary approvals and/or permits for the project from the applicable government agencies, including the state Department of Fish and Game, U.S. Fish and Wildlife Service, and Corps, and shall submit them to the Board prior to the start of dredging.
- 25. The Board may reconsider the terms of this Order based on continued concerns with CEQA compliance and the need for long-term planning for channel maintenance.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, complete and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 17, 1998.

Loretta K. Barsamian
Executive Officer

Attachments:

A: Self-Monitoring Program (SMP)

CALIFORNIA REGIONAL WATER QUALITY CONTROL PLAN SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR ORDER 98-060

Alameda County Public Works Agency Urgent Sediment Removal Project

I. General

A. Basis

Reporting responsibilities of the Project Proponent as "waste discharger" are specified in Sections 13225(a), 13267(b), 13268, 13383, 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

B. Purpose

The principal purposes of a monitoring program by a discharger, also referred to as a Self-Monitoring Program, are to document compliance with effluent requirements and prohibitions established by this Board; facilitate self-policing by the discharger in the prevention and abatement of pollution arising from improper effluent; to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards; and to prepare water and wastewater quality inventories.

C. Sampling and Methods

Sample collection, storage and analysis shall be performed according to 40 CFR, Section 136, or other methods approved by the Executive Officer.

Water analyses conducted on samples collected for laboratory analysis shall be performed by a laboratory approved by the Department of Health Services (DHS) or a laboratory approved by the Executive Officer.

All monitoring instruments and equipment, including instruments and equipment used in field sampling and analysis, shall be properly calibrated and maintained to ensure accuracy of measurements.

Routine sampling shall follow Quality Assurance/ Quality Control procedures including the use of field, equipment and laboratory blanks and laboratory surrogate samples.

All Quality Assurance/Quality Control measures and results shall be reported along with the data.

II. DEFINITION OF TERMS

<u>Grab Sample</u> is defined as an individual sample collected in a short period of time not exceeding 15 minutes. They are to be used primarily in determining compliance with receiving water limits. Grab samples only represent the condition that exists at the time the water and effluent are collected.

100 feet from the point of discharge is defined as 100 feet downstream of the point at which water diverted around the dredging site is discharged into a water of the State. For example, one such point of discharge on the subject project would be 100 feet downstream of the point of discharge into Old Alameda Creek.

Active Site is defined as that portion of a channel or stream on which dredging is being conducted and/or that may be subject to surface water flow during dredging.

Duly Authorized Representative is one whose:

- a. authorization is made in writing by a principal executive officer, or
- b. authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity (e.g; field supervisor, project manager, chief engineer).

III. SPECIFICATIONS FOR SAMPLING AND ANALYSES

The Discharger is required to perform sampling and analyses as found in accordance with the following conditions and requirements:

A. Receiving Waters

- 1. Diverted water discharge sampling shall be conducted at the Active Sites during dredging. The first sampling event shall be conducted on the first day of the project.
- 2. Prior to start of dredging, background water samples shall be collected from 100 feet from the point of discharge (e.g., on Alameda Creek 100 feet below the downstream coffer dam and on Old Alameda Creek 100 feet below the point of discharge of water from Alameda Creek). Samples must be

representative of typical undisturbed conditions, and must not be taken during a rainstorm or subsequent runoff event. In addition, the Discharger may collect background samples on a daily basis a minimum of 500 feet upstream of the active site. Background data generated by analysis of samples collected daily will be valid for discharge occuring in the same day.

These samples shall be analyzed for the following constituents:

Constituents	Type of sample	Units
Turbidity	Grab	NTUs
pН	Grab	Not Applicable
Dissolved Oxygen	Grab	mg/l

Receiving water samples shall be collected at the active sites, at least two samples within every 24-hour period, evenly spaced during the work hours, with the first set of samples no earlier than 1 hour after dredging has commenced each day. The location of each sampling site is 100 feet from the point of discharge. These samples shall be immediately analyzed on site for the following constituents:

Constituents	Type of sample	Units
Turbidity	Grab	NTUs
рН	Grab	Not Applicable
Dissolved Oxygen	Grab	mg/l

- 4. Samples shall be taken at least one foot below the surface of the water body when possible.
- 5. Duplicate samples shall be collected a minimum of once per week, with one set of samples analyzed on site and one set of samples sent to a laboratory for analysis of the same constituents analyzed for on site.
- 6. If analytical results for constituents analyzed on-site show that any grab sample exceeds any receiving water limit, confirmation samples shall be taken within 2 hours and every subsequent two hours, and analyzed for all constituents for which on-site analysis is required. Sampling at this higher frequency shall continue until the exceedance has been corrected

- 7. If any receiving water limit for a constituent or constituents is exceeded, then the Discharger shall follow the following process to address the exceedance:
 - a. Identify source of exceedance;
 - b. Correct source of exceedance;
 - c. Resample to determine whether exceedance has been corrected.
- 8. If any receiving water limit for a constituent or constituents is exceeded for a 12 hour period, then the Discharger shall immediately notify the Board by telephone and telefax of the exceedance and of how they are correcting or will correct the exceedance.
- 9. If any receiving water limit for a constituent or constituents is exceeded for a a 24 hour period, then a violation shall have occurred and the dredging shall be terminated until the cause of the violation is found and sampling demonstrates that the exceedance has been corrected or when the Discharger has provided the Board with a corrective action plan, acceptable to the Executive Officer, that provides alternative methods of compliance.
- 10. For other violations, the Discharger shall notify the Board immediately whenever violations are detected and discharge shall not resume until the Discharger has provided the Board with a corrective action plan, acceptable to the Executive Officer, that provides alternative methods of compliance.
- 11. It is expected that the placement of fill material for coffer dams will result in the unavoidable exceedance of instantaneous maximum limits. Therefore, corrective action shall not be required for exceedances that occur within 8 hours of the initial placement and removal of fill material for coffer dams.

B. Standard Observations

The following observations shall be recorded on every day of operation:

- 1. Receiving Water:
 - a. Floating and suspended materials of waste origin (to include oil, grease, algae, and other macroscopic particulate matter): presence or absence, source and size of affected area.
 - b. Discoloration and turbidity: description of color, source and size of affected area.
 - c. Odor: presence or absence, characterization, source, distance of travel and wind direction.

- d. Hydrographic condition including: time and height of corrected low and high tides; and depth of water columns and sampling depths.
- e. Weather condition including: air temperatures, wind direction and velocity and precipitation.

2. Decant Water:

- a. No decant water discharge from active dredging sites or dredged material stockpile sites to any drainage is permitted.
- 3. Progress and location of active dredging and control measures, noted on a map of the site.

C. Records to be Maintained

- 1. Written reports, strip charts, calibration and maintenance records, and other records shall be maintained by the Discharger and accessible at all times. Records shall be kept for a minimum of three years. Records shall include notes and observations for each sample as follows:
 - a. Identity of each sampling and observation station by number
 - b. Date and time of sampling
 - c. Date and time analyses are started and completed and the name of person conducting analyses
 - d. Complete procedure used, including method of preserving or analyzing sample and identity and volumes or reagents used. A reference to a specific section of <u>Standard Methods</u> is satisfactory.
 - e. Calculations of results.
 - f. Results of analyses and/or observations, including a comparison of the laboratory and field results for duplicate samples.
- 2. Records shall include a map or maps of the site showing the location of sediment sampling locations, coffer dams, discharge pipes, access ramps, etc.
- 3. A tabulation shall be maintained showing the following flow data for effluent stations and for the reach to be desilted:
 - a. Total flow or volume on a daily basis.

b. Maximum and minimum flows for each month, if applicable.

IV. REPORTS TO BE FILED WITH THE REGIONAL BOARD

A. Report of Permit Violations

In the event that this permit is violated, the Discharger shall notify the Board by telephone immediately and shall notify the Board in writing within seven calendar days. A written report shall include time and date of incident, duration and estimated volume of discharge or bypass. The report shall include a detailed discussion of the reasons for the non-compliance and what steps were or will be taken to correct the failure and prevent it from occurring again.

B. Self-Monitoring Reports

During dredging, written reports shall be filed regularly for <u>each calendar month</u> and filed no later than the fifteenth of each month. The reports shall include the following:

- a. A transmittal letter which includes identification of changes to the project design and any unplanned releases or failures that have occurred since the last reporting period.
- b. A monitoring report which details: the magnitude of the releases or failures; any discharge limit exceedances; dates of all exceedances; cause of the failures, releases or other violations; any corrective actions taken or planned; and the schedule for completion of corrective action.
- c. Reports and the letter transmitting reports shall be signed by a principal executive officer(s) of the Discharger or by a duly authorized representative of that person.
- I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:
- 1. Has been developed in accordance with the procedures set forth in this Board's Resolution No. 73-16, in order to obtain data and document compliance with discharge requirements established in Regional Board Order No. 98-060.
- 2. Was adopted by the Board on, June 17, 1998.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger, and revisions will be ordered by the Executive Officer or Board.

Loretta K. Barsamian

Executive Officer